

## PATENT COOPERATION TREATY

## PCT

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference <b>030044PC</b>	<b>FOR FURTHER ACTION</b> See Form PCT/IPEA/416	
International application No. <b>PCT/SE 2004/000129</b>	International filing date (day/month/year) <b>02-02-2004</b>	Priority date (day/month/year) <b>25-03-2003</b>
International Patent Classification (IPC) or national classification and IPC <b>H04H 1/00</b>		
Applicant <b>AIRNET HOLDINGS AB et al</b>		

- This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
- This REPORT consists of a total of 3 sheets, including this cover sheet.
- This report is also accompanied by ANNEXES, comprising:
  - ☒ (sent to the applicant and to the International Bureau) a total of 2 sheets, as follows:
    - ☒ sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).
    - ☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.
  - ☐ (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) \_\_\_\_\_, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

- This report contains indications relating to the following items:
 

<input checked="" type="checkbox"/>	Box No. I	Basis of the report
<input type="checkbox"/>	Box No. II	Priority
<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
<input type="checkbox"/>	Box No. IV	Lack of unity of invention
<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
<input type="checkbox"/>	Box No. VI	Certain documents cited
<input type="checkbox"/>	Box No. VII	Certain defects in the international application
<input type="checkbox"/>	Box No. VIII	Certain observations on the international application

Date of submission of the demand <b>12-10-2004</b>	Date of completion of this report <b>22-06-2005</b>
Name and mailing address of the IPEA/SE Patent- och registreringsverket Box 5055 S-102 42 STOCKHOLM Facsimile No. +46 8 667 72 88	Authorized officer <b>Elisabet Åselius/MN</b> Telephone No. +46 8 782 25 00

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/SE 2004/000129

Box No. 1 Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

☒ This report is based on a translation from the original language into the following language \_\_\_\_\_ which is the language of a translation furnished for the purposes of:

- ☐ International search (under Rules 12.3 and 23.1(h))  
☒ publication of the international application (under Rule 12.4)  
☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the elements of the international application, this report is based on (replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report):

☐ the international application as originally filed/furnished  
☒ the description:  
pages 1 - 7 \_\_\_\_\_ as originally filed/furnished

pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_  
pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

☒ the claims:  
pages \_\_\_\_\_ as originally filed/furnished  
pages\* \_\_\_\_\_ as amended (together with any statement) under Article 19  
pages\* 1-2 received by this Authority on 22-02-2005  
pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

☒ the drawings:  
pages 1 \_\_\_\_\_ as originally filed/furnished  
pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_  
pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages \_\_\_\_\_  
☐ the claims, Nos. \_\_\_\_\_  
☐ the drawings, sheets/figs \_\_\_\_\_  
☐ the sequence listing (specify): \_\_\_\_\_  
☐ any table(s) related to the sequence listing (specify): \_\_\_\_\_

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages \_\_\_\_\_  
☐ the claims, Nos. \_\_\_\_\_  
☐ the drawings, sheets/figs \_\_\_\_\_  
☐ the sequence listing (specify): \_\_\_\_\_  
☐ any table(s) related to the sequence listing (specify): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/SE 2004/000129

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

## 1. Statement

Novelty (N)	Claims	<u>1-5</u>	YES
	Claims		NO
Inventive step (IS)	Claims	<u>1-5</u>	YES
	Claims		NO
Industrial applicability (IA)	Claims	<u>1-5</u>	YES
	Claims		NO

## 2. Citations and explanations (Rule 70.7)

The claimed invention relates to a method for sending large volumes of information to one or more personal computers from a database, via a digital high-speed network such as a DAB radio network, in a way that minimizes the time the personal computer has to spend online.

Documents cited in the International Search Report:

D1: "IP based enhanced data casting services over radio broadcast networks" Kellerer, w. et al.

D2: "A distributed proxy server system for wireless mobile Web service" Kisup k. et al.

D3: WO 9914775 A1

D4: GB 2313981 A

D5: US 2003/0054804 A1

D6: WO 0178350 A1

D1 describes a method of sending large volumes of information from a database to one or more personal computers or corresponding devices via a DAB radio network, (fig.1). A proxy server is provided between the personal computer and the server, (fig.5). The proxy server may store the information and check that the information is complete, (section 3.3). The information may be given an identification code in order to make it readable only to the terminal that requested the information, (p.201, col.2).

Documents D2-D6 reveal the state of the art concerning information transfer via DAB.

D1-D6 do not mention that a proxy server selectively either forwards the information directly, or checks whether it is complete first. Nor do the documents mention that there is a proxy server on the side of the sender. Thus, the claimed invention fulfils the requirements of novelty, inventive step and industrial applicability.

The Swedish Patent Office  
PCT International Application

PCT / SE 2004 / 000129

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## CLAIMS

1. A method of sending large volumes of information to one or more personal computers (1) or corresponding devices from a database (2) or corresponding device, such as a company's product line stored in connection with the company's home page or a portal, wherein the personal computer (1) can be connected, via a communications network (5), such as the Internet, to said database (2) which includes a computer in the form of a server (6), wherein the database contains said information and wherein a user is able to ask for information during such a connection via the personal computer (1) wherein a digital network (7-10) having a high transmission speed, such as a DAB-radio network, comprising a transmitter means (7) and a receiver (8) can be caused to send said requested information and wherein the information is caused to be received by a receiver (8) in the possession of the user, wherein requested information in the database (2) is given an identification code which is sent to said receiver (8), wherein said receiver is caused to analyse the received DAB signal with regard to said identification code, wherein the method is characterised by providing a so called proxy server between the personal computer (1) and the server (6), respectively between said server (6) and said transmitter means (7) wherein said proxy server (4) is caused selectively to either forward the collected information to the transmitter means (7) for transmission of said information via said radio network (7-10), so that said information can be received in the receiver (8), or to alternatively be transparent for the exchange of information between the server (6) and the personal computer (1), wherein when it is chosen to transfer requested information from the server (6) via said network (7-10) to said receiver (8), via the proxy server, the proxy server (4) is caused, in response to a request for certain information to the personal computer (1) from the server (6), to fetch said information from the server (6) and therewith check that the information is complete, i.e. that all packets of information have been received, and wherein the proxy server is caused to store the complete collected information and to forward said information to the transmitter means (7).

2. A method according to Claim 1, characterised by causing the transmission of information via the radio network (7-10) to be effected without the influence of a possible communications link from the personal computer (1) to the server (4); and by causing the received information to be sent to the personal computer (1).

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3. A method according to Claim 1 or 2, characterised by making said choice prior to fetching said information from the server (6) to the proxy server (4).

4. A method according to Claim 1, 2 or 3, characterised by causing said information to be sent in the form of an information block that includes specific information requested by the personal computer (1).

5. A method according to Claim 1, 2, 3 or 4, characterised by causing the requested information to be sent at given time points or as soon as possible; and by causing the proxy server (4) to send to the personal computer (1) a message as to when information requested by the personal computer (1) will be sent.

6. A method according to any one of the preceding Claims, characterised in that the digital network is a DAB radio network.

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AMENDED SHEET